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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/363,823	07/30/1999	KAZUHIRO NAKATA	862.2957	8593

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

LAMB, TWYLER MARIE

ART UNIT PAPER NUMBER

2622

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/363,823 ✓	<b>Applicant(s)</b> NAKATA, KAZUHIRO	
	<b>Examiner</b> Twyler M. Lamb	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9, 20-22, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11, 19 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-5, 10-11, 19 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Arai et al. (Arai) (US 5,768,484)

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With regard to claims 1 and 2, Arai discloses a data processing method for processing data in an image printing apparatus subjected to time-division drive of a printhead (col 5, line 24 – col 6, line 3), said apparatus having an editing buffer (image memory 7; col 5, line 24 – col 6, line 3) and a print buffer (image memory 7; col 5, line 24 – col 6, line 63), comprising the step of: rearranging one word of data corresponding to a plurality of contiguous print elements provided on the printhead, that is stored divisionally in two or more address regions in the editing buffer, and storing the data in one address region in the print buffer (col 5, line 24 – col 6, line 63).

With regard to claim 3, Arai discloses further comprising: delay means for delaying a set of data that corresponds to contiguous print elements, a number of which is a whole-number multiple of a number of time divisions employed in time-division drive, said delayed data being from the data that has been read out of said editing buffer (col 9, line 42 – col 10, line 10).

With regard to claim 4, Arai discloses wherein storage means for a horizontal-to-vertical conversion is used as said print buffer (col 9, line 42 – col 10, line 10).

With regard to claim 5, Arai discloses an image printing apparatus subjected to time-division drive in which  $n$  represents the number of time divisions and one word is composed of  $m$  bits, comprising: data processing means for reading  $n$ -bit data corresponding to  $n$  contiguous serving as one unit from an editing buffer and storing contiguous 1-bit data, where the lowest common multiple of  $n$  and  $m$  is 1, in one address within a print buffer (col 5, line 24 – col 7, line 24).

With regard to claims 10 and 11, Arai discloses wherein the print elements comprise nozzles for discharging ink (col 4, lines 51-60).

With regard to claim 19, Arai discloses wherein said editing buffer and said print buffer are allocated in different area within a memory respectively (col 5, line 24 – col 6, line 63).

With regard to claim 23, Arai discloses a data transfer circuit of an image processing apparatus comprising: an editing buffer (image memory 7; col 5, line 24 – col 6, line 3) adapted to store data; a print buffer (image memory 7; col 5, line 24 – col 6, line 63) adapted to print data; a control unit (CPU 1) adapted to control the transfer of data from said editing buffer to said print buffer (col 5, line 24 – col 6, line 63); and an address generating unit (write-address counter 103) adapted to generate an address for the data transferred by said control unit, wherein the data comprises 8-bit image data (col 5, lines 30 - 65) arranged vertically or horizontally (col 5, lines 30 - 65).

### ***Allowable Subject Matter***

3. Claims 6-9, 20-22 and 24-25 are allowed.

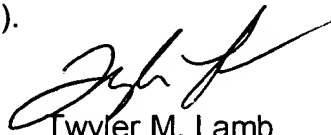
### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 2, 5, 10, 11, 19 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler M. Lamb whose telephone number is 571-272-7406. The examiner can normally be reached on Mon, Tues and Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Twyler M. Lamb  
Primary Examiner  
Art Unit 2622